

Metadata for Wind Cave National Park, Field Plots Data Base for Vegetation Mapping

Identification_Information:

Citation:

Citation_Information:

Originator:

U.S. Bureau of Reclamation, Remote Sensing and GIS Group,
Technical Service Center
Mail Code D-8260, POB 25007, Denver CO 80225

Publication_Date:

1999

Title: Wind Cave National Park, Field Plots Data Base for Vegetation Mapping

Geospatial_Data_Presentation_Form: Database

Series_Information:

Series_Name: USGS-NPS Vegetation Mapping Program

Issue_Identification: Wind Cave National Park

Publication_Information:

Publication_Place: Denver, CO

Publisher: USGS, Biological Resource Division, Center for Biological Informatics

Other_Citation_Details: Created under contract to the USGS-BRD-CBI.

Online_Linkage: <http://biology.usgs.gov/npsveg/wica/fielddata.html>

Description:

Abstract:

Vegetation field plots at Wind Cave NP were visited, described, and documented in a digital database. The database consists of 2 parts - (1) Physical Descriptive Data, and (2) Species Listings.

Purpose:

The vegetation plots were used to describe the vegetation in and around Wind Cave National Park and to assist in developing a final mapping classification system.

Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 199706

Ending_Date: 199708

Currentness_Reference: Field Work

Status:

Progress: Complete

Maintenance_and_Update_Frequency: not applicable

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -103.6194

East_Bounding_Coordinate: -103.3222

North_Bounding_Coordinate: 43.65139

South_Bounding_Coordinate: 43.50639

Description_of_Geographic_Extent:

Wind Cave National Park and about a 2 mile which includes private lands and portions of Custer State Park and Black Hills National Forest.

Keywords:

Theme:

Theme_Keyword_Thesaurus: None

Theme_Keyword: association

Theme_Keyword: alliance

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Theme_Keyword: land cover
Theme_Keyword: land use
Theme_Keyword: vegetation
Theme_Keyword: National Park Service

Place:

Place_Keyword_Thesaurus: None
Place_Keyword: Wind Cave
Place_Keyword: Pringle
Place_Keyword: South Dakota
Place_Keyword: National Park
Place_Keyword: Wind Cave National Park

Taxonomy:

Keywords/Taxon:

Taxonomic_Keyword_Thesaurus: None
Taxonomic_Keywords: Plants
Taxonomic_Keywords: vegetation
Taxonomic_Keywords: National Vegetation Classification System

Taxonomic_System:

Classification_System/Authority:

Classification_System_Citation:

Citation_Information:

Originator: U.S. Government; Federal Geographic Data Committee
Publication_Date: 19971022
Title: National Vegetation Classification Standard (NVCS)
Geospatial_Data_Presentation_Form: document
Publication_Information:
Publication_Place: Washington D.C.
Publisher: Federal Geographic Data Committee
Online_Linkage: http://www.fgdc.gov/standards/status/sub2_1.html

Taxonomic_Procedures:

Sequence of field test data and observation plots, and CIR photo signature field observations.

General_Taxonomic_Coverage:

Refer to complete listing of mapped plant alliances/associations under Supplemental Information above.

Taxonomic_Classification:

Taxon_Rank_Name: Kingdom
Taxon_Rank_Value: Plantae

Access_Constraints: None

Use_Constraints:

Any person using the information presented here should fully understand the data collection and compilation procedures, as described in the metadata, before beginning analysis. The burden for determining fitness for use lies entirely with the user. For purposes of publication or dissemination, citations or credit should be given to the U.S. Geological Survey, and the National Park Service, and the U.S. Bureau of Reclamation.

Point_of_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: USGS-NPS Vegetation Mapping Program Coordinator
Contact_Organization: U.S. Geological Survey, Center for Biological Informatics

Contact_Address:

Address_Type: mailing and physical address

Address:

U.S. Geological Survey, Center for Biological Informatics, MS 302, Room 8000, Building 810,

USGS-NPS Vegetation Mapping Program
Wind Cave National Park

Denver Federal Center
City: Denver
State_or_Province: Colorado
Postal_Code: 80225
Contact_Voice_Telephone: (303) 202-4220
Contact_Facsimile_Telephone: 303-202-4229
Contact_Facsimile_Telephone: 303-202-4219 (org)
Contact_Electronic_Mail_Address: gs-b-npsveg@usgs.gov
Browse_Graphic:
Browse_Graphic_File_Name: <http://biology.usgs.gov/npsveg/wica/images/wicaplot.gif>
Browse_Graphic_File_Description:
Graphic file showing vegetation field plot locations. Low resolution for web browser - 82 KB file size.
Browse_Graphic_File_Type: GIF
Data_Set_Credit: BRD-USGS, U.S. BOR, TNC
Native_Data_Set_Environment: DB4
Cross_Reference:
Citation_Information:
Originator:
U.S. Bureau of Reclamation, Remote Sensing and GIS Group, Denver, CO and
The Nature Conservancy
Publication_Date: 19980310
Title:
Wind Cave National Park, Field Plots Data Base for Vegetation Mapping:
Plot Data, Species Listing Data for Plots
Geospatial_Data_Presentation_Form: Database
Series_Information:
Series_Name: USGS-NPS Vegetation Mapping Program
Issue_Identification: Wind Cave National Park
Publication_Information:
Publication_Place: Denver, CO
Publisher: USGS, Biological Resource Division, Center for Biological Informatics
Other_Citation_Details: Created under contract to the USGS-BRD-CBI.
Online_Linkage: <http://biology.usgs.gov/npsveg/wica/fielddata.html>
Cross_Reference:
Citation_Information:
Originator: USGS/BRD, Center for Biological Informatics
Publication_Date: 19990430
Title: Accuracy Assessment Procedures and Results
Geospatial_Data_Presentation_Form: Database
Series_Information:
Series_Name: USGS-NPS Vegetation Mapping Program
Issue_Identification: Wind Cave National Park
Publication_Information:
Publication_Place: Denver, CO
Publisher: USGS, Biological Resource Division, Center for Biological Informatics
Other_Citation_Details:
This report was prepared by The National Conservancy,
Arlington, VA and U.S. Department of Interior Bureau of
Reclamation, Denver, CO, under contract from the U.S.
Department of Interior Biological Resource Division and
National Park Service.
Online_Linkage: <http://biology.usgs.gov/npsveg/wica/report.pdf#accuracy>
Online_Linkage: <http://biology.usgs.gov/npsveg/wica/report.pdf#assessment>

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Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report:

Physical description - Descriptive plot data were collected for 69 sites whose vegetation represents a full spectrum of alliance types present within Wind Cave National Park and its immediate surroundings. Attributes collected for each site include: a unique plot identification code, park name, quad name, UTM coordinates, UTM projection, plot survey date, surveyor's name, length, width, photo type, elevation, slope aspect, topographic position, landform, surface geology, Cowardin System category, hydrology, surface material description, soil texture, soil drainage, leaf phenology, leaf type, and physiognomy. Species - Descriptive plot data were collected for 69 sites whose vegetation represents a full spectrum of alliance types present within Wind Cave National Park and its immediate surroundings. This database which is the second of two databases containing plot field data, delineates species. Individual species described at each of 69 plots is listed, one line per species, with the following information: Plot Identification Code, Species Name, Species Cover (0=trace, 1=< 1%, 2=1-5%, 3=5-25%, 4=25-50%, 5=50-75%, 6=75-100%), Plantcode (first 2 letters of genus+first 2 letters of spp.), and Plant Strata (T, S, H, v.s, and no entry).

Logical_Consistency_Report:

Physical description - Entries for each of the listed attributes are in the form of consistent groupings of either textual or numerical descriptors. Species - Entries for each of the listed attributes are in the form of consistent groupings of either textual or numerical descriptors as described under 2.1.1: attribute accuracy report. NOTE1: The significance of numbers appended to some of the Plant Codes is not known. NOTE2: entries under Plant Strata were not clearly defined on the original field forms. It is assumed that T=tree, S=shrub, and H=herbaceous. It is also assumed that numbers represent canopy levels (starting with 1 as tallest), v.s. = very short. Plant strata entries in this database are not always consistent with these assumed labeling conventions.

Completeness_Report:

Descriptive entries for each of the 69 plots are complete for each of the applicable attributes listed in the database.

Positional_Accuracy:

Horizontal_Positional_Accuracy:

Horizontal_Positional_Accuracy_Report:

X,Y UTM coordinates representing each of the 69 plots were collected by P-code PLGR (Precise Lightweight GPS Receiver) receivers, with an accuracy ranging from +/- 10 m. to +/- 30 m. based on 60 second averaging at each point.

Vertical_Positional_Accuracy:

Vertical_Positional_Accuracy_Report: Not applicable

Lineage:

Methodology:

Methodology_Type: Field and Remote Sensing

Methodology_Identifier:

Methodology_Keyword_Thesaurus: None

Methodology_Keyword: photo-interpretation

Methodology_Keyword: Field Methods for Vegetation Mapping

Methodology_Keyword: ground truth

Methodology_Keyword: reconnaissance

Methodology_Keyword: gradsect

Methodology_Keyword: observation

Methodology_Keyword: plot

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Methodology_Keyword: photo signatures

Methodology_Keyword: ground verification

Methodology_Keyword: stereoscope

Methodology_Description: Field sampling using releve plots

Source_Information:

Source_Citation:

Citation_Information:

Originator: USGS,BRD,Center for Biological Informatics

Publication_Date: 19960405

Title: Wind Cave National Park Sampling and Classification

Geospatial_Data_Presentation_Form: report

Publication_Information:

Publication_Place: Denver, CO

Publisher: USGS, BRD, Center for Biological Informatics

Other_Citation_Details:

This report was generated by the Nature Conservancy under contract to the USGS, BRD, CBI.

Online_Linkage: <http://biology.usgs.gov/npsveg/wica/report.pdf>

Type_of_Source_Media: Online

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 199510

Source_Currentness_Reference: Ground Condition

Source_Citation_Abbreviation: WICA sample and classification

Source_Contribution: Report summarizing plot data collection effort

Source_Information:

Source_Citation:

Citation_Information:

Originator: US Dept of Interior

Originator: National Biological Survey(Now USGS/Biological Resources Division)

Originator: and National Park Service

Publication_Date: 199411

Title:

Standardized National Vegetation Classification System; protocol document for the USGS-NPS Vegetation Mapping Program (unpublished report)

Geospatial_Data_Presentation_Form: report

Edition: Final Draft

Publication_Information:

Publication_Place: Denver, CO

Publisher: USGS/BRD/Center for Biological Informatics

Other_Citation_Details:

Report prepared under contract by The Nature Conservancy, 1815 N. Lynn Street, Arlington, Virginia 22209 and Environmental Systems Research Institute, 380 New York street, Redlands, California 92373

Online_Linkage: <http://biology.usgs.gov/npsveg/classification/index.html>

Type_of_Source_Media: Online

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 199411

Ending_Date: 2010

Source_Currentness_Reference: Publication Date and indefinitely

Source_Citation_Abbreviation: SNVCS protocol document

Source_Contribution:

USGS-NPS Vegetation Mapping Program

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Report prepared under contract by The Nature Conservancy, 1815 N. Lynn Street, Arlington, VA and the Environmental Systems Research Institute, 380 New York Street, Redlands, CA 92373. Describes the structure, content, and origins of the Standard National Vegetation Classification System, and it describes the process by which the system is to be applied to changing requirements.

Source_Information:

Source_Citation:

Citation_Information:

Originator: USGS, BRD, Center for Biological Informatics

Publication_Date: 19960405

Title: Wind Cave National Park Vegetation Descriptions

Geospatial_Data_Presentation_Form: report

Series_Information:

Series_Name: USGS-NPS Vegetation Mapping Program Park Vegetation Descriptions

Issue_Identification: Wind Cave National Park

Publication_Information:

Publication_Place: Denver, CO

Publisher: USGS, BRD, Center for Biological Informatics

Other_Citation_Details:

This report was generated by the Nature Conservancy under contract to the USGS, BRD, CBI.

Online_Linkage: <http://biology.usgs.gov/npsveg/wica/descript.pdf>

Type_of_Source_Media: Online

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 19960405

Source_Currentness_Reference: Publication Date

Source_Citation_Abbreviation: WICA Veg Descriptions

Source_Contribution:

This document describes and defines the vegetation classification system which is to be used for describing and mapping the vegetation at Wind Cave National Park

Source_Information:

Source_Citation:

Citation_Information:

Originator:

United States Department of Interior, National Biological Survey (now USGS Biological Resources Division) and the National Park Service

Publication_Date: 199412

Title: Field Methods for Vegetation Mapping

Geospatial_Data_Presentation_Form: document

Publication_Information:

Publication_Place: Denver, CO

Publisher: USGS, Biological Resources Division, Center for Biological Informatics

Other_Citation_Details:

This report was generated by the Nature Conservancy under contract to the USGS, BRD, CBI.

Online_Linkage: <http://biology.usgs.gov/npsveg/fieldmethods/index.html>

Type_of_Source_Media: Online

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 199412

Ending_Date: 2010

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Source_Currentness_Reference: Publication Date and indefinitely

Source_Citation_Abbreviation: field methods protocol document

Source_Contribution:

This document defines the methods and protocols for field data collection to be used as part of the USGS-NPS Vegetation Mapping Program.

Process_Step:

Process_Description:

The following describes the tasks performed by The Nature Conservancy to produce descriptive data for 69 vegetation sampling plots in two separate database tables. Physical description - The first of the two tables contains general descriptive information at each of the plots. Plot sites were selected by information obtained during a reconnaissance visit to the park in April of 1995, and by examining tone and textural patterns on the WICA AERIAL PHOTOGRAPHS. Site physical parameters, species types, and vegetation strata were described at each site. Plot data were manually recorded on field forms on-site, and subsequently keyed into the database files described herein. Information in the plot database was then used to develop the classification system and plant identification keys contained in the TNC WICA SAMPLING AND CLASSIFICATION REPORT. Species - The second of the two tables contains listings of individual species found in each plot, along with height and cover estimates, and strata delineations. The SPECIES LISTING database contains line entries for each species including the Plot Code, Numeric species code, full scientific species name, cover estimate, a unique alphanumeric species identifier (plant code), and Plant Strata delineation. Plot sites were selected subjectively because of the heterogeneity of the vegetation and the small number of samples per type. Since aerial photos were not available at the time of plot selection, visual reconnaissance was conducted at the summit of the bluff to examine vegetation patterns for determining plot placement. Plot data were manually recorded on field forms on-site, and subsequently keyed into the database files described herein. Information in the plot database was then used to develop the classification system and plant identification keys contained in the WIND CAVE SAMPLING AND CLASSIFICATION REPORT.

Source_Used_Citation_Abbreviation: wica Aerial Photos

Source_Used_Citation_Abbreviation: SNVCS protocol document

Source_Used_Citation_Abbreviation: Field Methods for Vegetation Mapping

Process_Date: 19960405

Source_Produced_Citation_Abbreviation: wica sample and classification

Source_Produced_Citation_Abbreviation: wica Veg Descriptions

Process_Contact:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: The Nature Conservancy

Contact_Person: Dennis Grossman

Contact_Position: Chief Ecologist, The Nature Conservancy

Contact_Address:

Address_Type: Physical Address

Address: 1815 Lynn Street

City: Arlington

State_or_Province: VA

Postal_Code: 22209

Country: USA

Contact_Voice_Telephone: (703) 841-5305

Contact_Electronic_Mail_Address: dgrossman@tnc.org

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Spatial_Data_Organization_Information:

Direct_Spatial_Reference_Method: Vector

Point_and_Vector_Object_Information:

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Label Point

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Point

Spatial_Reference_Information:

Horizontal_Coordinate_System_Definition:

Planar:

Grid_Coordinate_System:

Grid_Coordinate_System_Name: Universal Transverse Mercator

Universal_Transverse_Mercator:

UTM_Zone_Number: 13

Transverse_Mercator:

Longitude_of_Central_Meridian: -105

Latitude_of_Projection_Origin: 0

False_Easting: 500000

False_Northing: 0

Scale_Factor_at_Central_Meridian: .9996

Planar_Coordinate_Information:

Planar_Coordinate_Encoding_Method: coordinate pair

Coordinate_Representation:

Abscissa_Resolution: 1

Ordinate_Resolution: 1

Planar_Distance_Units: meters

Geodetic_Model:

Horizontal_Datum_Name: North American Datum of 1983

Ellipsoid_Name: Geodetic Reference System 80

Semi-major_Axis: 6378137

Denominator_of_Flattening_Ratio: 298.257

Entity_and_Attribute_Information:

Overview_Description:

Entity_and_Attribute_Overview:

Each of 69 vegetation mapping plot sites contains the attributes of species found. Physical Description - General plot information is described by identification codes, locational information (including state, park name, and USGS 7 1/2' topographic quad name). Physical factors tabulated in the database include UTM_X, UTM_Y, UTM Zone, map projection, survey date, name of surveyors, plot length and width, type of photos used, plot elevation, slope aspect, topographic position, landform type, surface geology, Cowardin system descriptor, hydrology, rock size, surface material type, soil texture and drainage, leaf phenology, leaf type, and physiognomy. Species - (sp_code is a project specific code for each species found, species is the scientific name for that species, spcover is the species present and the percent cover for each species, plant code is the first two letters of the genus and first two letters of the species. If the code are not unique a number is added to make the code unique). This includes strata cover which is an average percent cover of that particular species, 1 = 0-10%, 2 = 10-25%, 3 = 25-60% and 4 = 60-100%, pstrata is the type of vegetation, T1 = emergent, T2 = canopy, T3 = sub-canopy, S1 = tall shrub, S2 = short shrub, H = herbaceous, N = non-vascular, V = vine/liana, and E = epiphyte).

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Entity_and_Attribute_Detail_Citation:

Wind Cave National Park, USGS/NPS Vegetation Mapping Program, Technical
Memorandum No. 8260-99-03, USBR

Distribution_Information:

Distributor:

Contact_Information:

Contact_Person_Primary:

Contact_Person: USGS-NPS Vegetation Mapping Program Coordinator

Contact_Organization:

U.S. Geological Survey, Center for Biological
Informatics

Contact_Address:

Address_Type: mailing and physical address

Address:

U.S. Geological Survey, Center for Biological
Informatics, MS 302, Room 8000, Building 810,
Denver Federal Center

City: Denver

State_or_Province: Colorado

Postal_Code: 80225

Contact_Voice_Telephone: (303) 202-4220

Contact_Facsimile_Telephone: 303-202-4229

Contact_Facsimile_Telephone: 303-202-4219 (org)

Contact_Electronic_Mail_Address: gs-b-npsveg@usgs.gov

Resource_Description: WICA Plots data; Physical Descriptive Data and Species Listing Data.

Distribution_Liability:

Although these data have been processed successfully on a computer system at the Biological Resources Division, no warranty expressed or implied is made regarding the accuracy or utility of the data on any other system or for general or scientific purposes, nor shall the act of distribution constitute any such warranty. This disclaimer applies both to individual use of the data and aggregate use with other data. It is strongly recommended that these data are directly acquired from a Biological Resources Division server, and not indirectly through other sources which may have changed the data in some way. It is also strongly recommended that careful attention be paid to the contents of the metadata file associated with these data. The Biological Resources Division shall not be held liable for improper or incorrect use of the data described and/or contained herein.

Standard_Order_Process:

Digital_Form:

Digital_Transfer_Information:

Format_Name: HTML

Digital_Transfer_Option:

Online_Option:

Computer_Contact_Information:

Network_Address:

Network_Resource_Name: <http://biology.usgs.gov/npsveg/wica/fielddata.html>

Fees: None

Metadata_Reference_Information:

Metadata_Date: 20011022

Metadata_Review_Date: 20050523

Metadata_Contact:

Contact_Information:

Contact_Organization_Primary:

USGS-NPS Vegetation Mapping Program
Wind Cave National Park

Contact_Organization: USGS-NPS Vegetation Mapping Program Coordinator
Contact_Address:
Address_Type: mailing and physical address
Address:
U.S. Geological Survey, Center for Biological Informatics, MS 302,
Room 8000, Building 810, Denver Federal Center
City: Denver
State_or_Province: Colorado
Postal_Code: 80225
Country: USA
Contact_Voice_Telephone: (303) 202-4220
Contact_Facsimile_Telephone: (303) 202-4219
Contact_Electronic_Mail_Address: gs-b-npsveg@usgs.gov
Metadata_Standard_Name: FGDC-STD-001.1-1999 Content Standard for Digital Geospatial Metadata, 1998 Part
1: Biological Data Profile, 1999
Metadata_Standard_Version: FGDC-STD-001-1998
Metadata_Extensions:
Online_Linkage: <http://biology.usgs.gov/fgdc.bio/bionwext.txt>
Profile_Name: Biological Data Profile FGDC-STD-001.1-1999